January 11, 2013 1420 East 6<sup>th</sup> Ave. P.O. Box 200701 Helena, MT 59620-0701

Environmental Quality Council Montana Department of Environmental Quality Montana Department of Fish, Wildlife and Parks

> Fisheries Division Endangered Species Coordinator Missoula Office

Montana State Library, Helena

MT Environmental Information Center

Montana Audubon Council

Montana Wildlife Federation

North Powell Conservation District, 1002 Hollenback Road, Suite C, Deer Lodge, MT 59722

Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722

Montana River Action, 304 N 18<sup>th</sup> Ave., Bozeman, MT 59715

U.S. Army Corp of Engineers, Helena

U.S. Fish and Wildlife Service, Helena

U.S. Fish and Wildlife Service, 922 Bootlegger Trail, Great Falls, MT 59404

State Historic Preservation Office, Helena

Big Blackfoot Chapter Trout Unlimited, P.O. Box 1, Ovando, MT 59854

Heart-Heart Ranch, 401 Valley of Moon Road, Clinton, MT 59825

### Ladies and Gentlemen:

Please find enclosed an Environmental Assessment (EA) prepared for the Future Fisheries Improvement Program. The Program tentatively plans to re-construct about 1,250 feet of a straightened reach of Pearson Creek, a tributary to Chamberlain Creek located in the Blackfoot River drainage. Additionally, the project calls for replacing an existing undersized road culvert with a much larger concrete box culvert and extensively re-vegetating the riparian corridor with shrub transplants and sprigs. The intent of the project is to enhance habitat in a reach of Pearson Creek for a mixed assemblage of fish, including a slightly hybridized population of westslope cutthroat trout. The project site is located on the Heart-Heart Ranch about 5 miles west of the town of Ovando in Powell County.

Please submit any comments that you have by 5:00 P.M., February 15, 2013 to Montana Fish, Wildlife & Parks at the address listed above. The funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer Habitat Section Fisheries Bureau e-mail: mlere@mt.gov

#### ENVIRONMENTAL ASSESSMENT

# Fisheries Division Montana Fish, Wildlife & Parks Pearson Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted sections 87-1-272 through 273, MCA that directs the Montana Fish, Wildlife and Parks (FWP) to administer a Future Fisheries Improvement Program. The program involves providing funding for physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Improvement Program is proposing to provide partial funding to a project calling for the restoration of a reach of Pearson Creek and the replacement of an existing undersized road culvert with a much larger concrete box culvert. Pearson Creek has been the site of numerous previous restoration activities, including a donated water lease for in-stream flow, channel restoration, riparian re-vegetation and changes in grazing management. The intent of the project is to enhance aquatic habitat in a 1,250-foot reach and to improve fish passage to the upper seven miles of the stream. Pearson Creek is a tributary to Chamberlain Creek located in the Blackfoot River drainage about 5 miles west of the town of Ovando in Powell County. The project would be located on the Heart-Heart Ranch.

- I. <u>Location of Project</u>: The project site is located on Pearson Creek, a tributary to Chamberlain Creek located in the Blackfoot River drainage within Township 15 North, Range 13 West, Section 34 in Powell County (Attachment 1)
- II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded fisheries habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on private and public lands. This proposed project would help meet this goal.

Pearson Creek is a small 2<sup>nd</sup> order tributary to Chamberlain Creek that supports a slightly hybridized population of westslope cutthroat trout (98% pure), as well as populations of brook trout, brown trout and longnose sucker. The stream is the site of numerous previous restoration activities. A portion of Pearson Creek, as it flows through the Heart-Heart Ranch, continues to be impaired by a straightened stream channel with banks elevated by earthen berms; an undersized culvert located on the county road crossing; and a paucity of riparian shrubs. The channelized stream currently drains into a wetland with no defined channel before returning to Pearson Creek along the county road borrow pit and then through the undersized road culvert. Upstream of the wetland, the stream loses about 50% of its flow through holes in the bermed banks, where it flows overland and then returns to the stream via a ditch. This proposed project

would restore the dimension, pattern, profile of the straightened channel; replace the undersized culvert with a much larger box culvert; and re-vegetate the riparian corridor with native shrubs.

### III. Scope of the Project:

This project would involve reconstructing 1,244 feet of new channel where the stream is currently straightened and bermed (Attachment 2). Two reference reaches are being used as design templates, including a higher gradient and confined type-B channel for the upper half and a lower gradient, more sinuous E-type channel for the lower half. The existing 42-inch X 28-inch X 30-foot long culvert would be upgraded to a 7-foot X 4-foot X 36-foot long concrete box culvert. This new culvert would maintain a natural stream bottom and accommodate bank full dimensions and discharges up to a 100-year event (Attachment 3). Re-vegetation efforts within the riparian corridor would include transplanting approximately 50 mature shrubs and sprigging approximately 3,000 willow stakes. A grazing management plan would be implemented to exclude the entire restored reach with riparian fencing. An off-channel livestock water system also is planned. The total cost for this project is estimated at \$92,300. Of this total, the Future Fisheries Improvement Program would be contributing up to \$35,000. The remaining funds will come from other sources and from in-kind services:

Contributor	In-kind services	In-kind cash
USFWS		\$17,000
Landowner	\$2,500	\$3,000
TU Embrace a Stream		\$9,500
Charles Engelhard Foundation		\$10,000
Powell County	\$800	
Big Blackfoot TU	\$13,500	\$3,000

#### IV. Environmental Impact Checklist:

Please see attached checklist.

# V. Explanation of Impacts to the Physical Environment

# 1. Terrestrial and aquatic life habitats.

Westslope cutthroat trout is the most prevalent salmonid in Pearson Creek, including both resident and migratory populations. Populations in lower Pearson Creek, including the reach proposed for restoration, currently appear to be suppressed. The density of cutthroat trout immediately upstream of the proposed treatment reach has averaged 18.6 age  $\geq 1$  fish/100 meters compared to 4.5 age  $\geq 1$  fish/100 meters within the proposed treatment reach. This proposed project is expected to enhance fish populations by improving overall habitat conditions in Pearson Creek and by enhancing upstream fish passage at an existing road crossing. Re-vegetation efforts within the riparian corridor, coupled with proposed changes in grazing management, are expected to improve habitat for riparian dependent wildlife.

### 2. Water quantity, quality and distribution.

Channel re-construction would be conducted in the dry to minimize water quality impacts. Once completed, flow would be released into the new channel incrementally to minimize turbidity and prevent the dewatering of the lower reach of the stream. However, short-term increases in turbidity will occur during project construction. To minimize turbidity, operation of equipment in the stream channel will be minimized to the extent practicable. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Montana Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted for requirements to meet the federal Clean Water Act (404 permit).

#### Aesthetics.

In the short term, aesthetics would be adversely impacted during construction due to ground disturbance and the presence of heavy equipment. In the long term, the proposed project would enhance aesthetics in Pearson Creek by restoring a straightened reach of stream and enhancing the riparian corridor.

# 7. Unique, endangered, fragile, or limited environmental resources.

Pearson Creek supports slightly hybridized westslope cutthroat trout, with both fluvial and resident populations being present. Testing has revealed a genetic composition of 98% cutthroat trout and 2% rainbow trout. Westslope cutthroat trout are native to Montana and are classified as a "Species of Special Concern" because of their shrinking distribution and declining numbers. The proposed project will improve overall aquatic habitat and enhance upstream fish passage, which is expected to benefit westslope cutthroat trout utilizing the stream.

# 8. Historic and archeological sites.

The project area has been disturbed by past channelization and by the construction of the existing county road culvert. As a result, there is a very low likelihood that cultural properties will be impacted by the proposed project. Should cultural materials be inadvertently discovered during the project, the State Historic Preservation Office will be contacted and the site will be investigated.

# VI. Explanation of Impacts on the Human Environment.

# 7. Access to & quality of recreational activities.

Improving overall aquatic habitat and enhancing upstream fish passage in Pearson Creek is expected to increase the recruitment potential of westslope cutthroat to the Blackfoot River, which could lead to improved recreational fishing opportunities.

# 13. Locally adopted environmental plans and goals.

Montana Fish, Wildlife and Parks has made a large financial investment in securing habitat protection in the headwaters of Chamberlain/Pearson creek drainages using Native Habitat Conservation (HCP) Funds. Completion of this project on Pearson Creek would help ensure the overall HCP project meets the goal of cutthroat trout conservation.

# 14. Transportation networks & traffic flows.

Public traffic would be delayed or re-routed during the period of construction of the new road crossing. The construction period is expected to be less than one week.

# VII. Discussion and Evaluation of Reasonable Alternatives.

# 1. No Action Alternative

If no funding is provided through the Future Fisheries Improvement Program, the applicant would have to either seek additional sources of funding to complete the project or a reach of Pearson Creek would continue to be degraded and upstream fish passage at an existing road culvert would remain impaired. Fish populations within this lower reach of Pearson Creek would remain diminished.

# 2. The Proposed Alternative

The proposed alternative intends to provide partial funding through the Future Fisheries Improvement Program to restore a straightened and degraded reach of Pearson Creek and to improve fish passage at an existing road crossing. The project is expected to benefit westslope cutthroat trout and may improve recruitment of these fish to the Blackfoot River.

### VIII. Environmental Assessment Conclusion Section

# 1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

#### 2. Level of public involvement.

The project application to the Future Fisheries Improvement Program has been posted on the Montana Fish, Wildlife and Parks webpage for public comment. No comments have been received to date. The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The

Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

# 3. Duration of comment period?

Public comment will be accepted through 5:00 PM on February 15, 2013.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer Habitat Section Fisheries Bureau Montana Fish, Wildlife and Parks PO Box 200701 Helena, MT 59620

Telephone: (406) 444-2432 e-mail: mlere@mt.gov

# MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701 (406) 444-2535

# ENVIRONMENTAL ASSESSMENT

Project Title: Pearson Creek Channel Restoration Project

Division/Bureau: Fisheries Bureau -Future Fisheries Improvement

Description of Project: The Future Fisheries Improvement Program tentatively plans to provide partial funding to a project calling for the restoration of a reach of Pearson Creek and the replacement of an existing undersized road culvert with a larger concrete box culvert. The intent of the project is to enhance overall aquatic habitat and improve fish passage to the upper seven miles of the stream. Pearson Creek is a tributary to Chamberlain Creek located in the Blackfoot River drainage about 5 miles west of the town of Ovando in Powell County.

# POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			Х			Х
2. Water quality, quantity & distribution			Х			Х
3. Geology & soil quality, stability & moisture			Х			Х
4. Vegetation cover, quantity & quality			Х			Х
5. Aesthetics			X			X
6. Air quality				Х		
7. Unique, endangered, fragile, or limited environmental resources			Х			х
8. Demands on environmental resources of land, water, air & energy				х		
9. Historical & archaeological sites				Х		Х

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

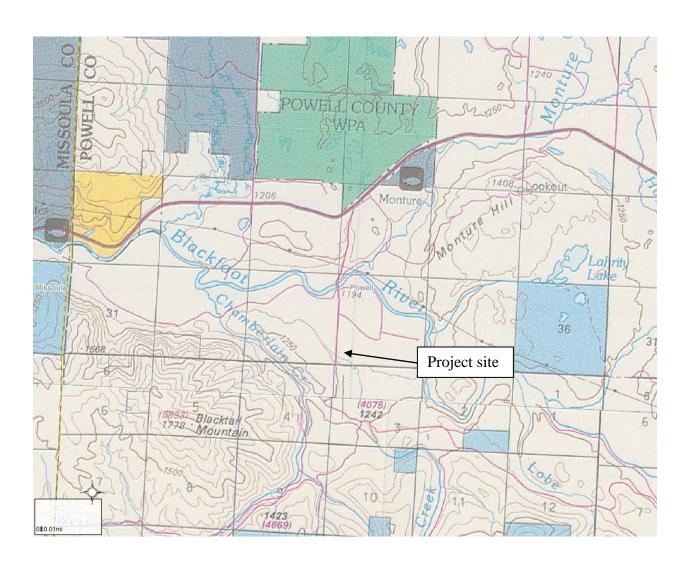
POTENTIAL IMPACTS ON	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				Х		
3. Local & state tax base & tax revenue				Х		
4. Agricultural or industrial production				Х		
5. Human health				Х		
6. Quantity & distribution of community & personal income				Х		
7. Access to & quality of recreational and wilderness activities			х			Х
8. Quantity & distribution of employment				Х		
9. Distribution & density of population & housing				Х		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				Х		
13. Locally adopted environmental plans & goals			Х			Х
14. Transportation networks & traffic flows			Х			Х

Other groups or agencies contacted or which may have overlapping jurisdiction: North Powell Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office
Individuals or groups contributing to this EA Ryen Neudecker, Big Blackfoot Chapter Trout

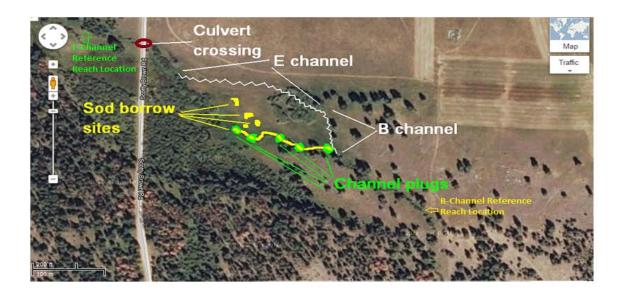
# **Unlimited**

Recommendation concerning preparation of EIS No EIS required.

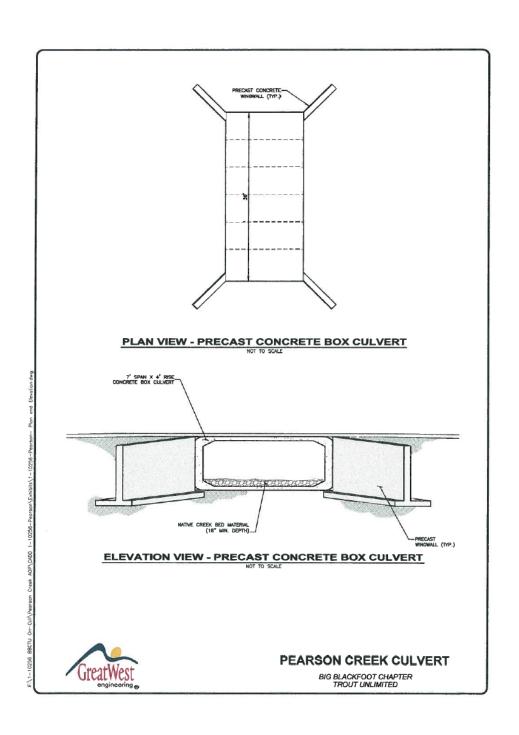
EA prepared by: Mark Lere Date: January 7, 2013



ATTACHMENT 1



# ATTACHMENT 2



ATTACHMENT 3